JD JOURNAL

25TH ANNIVERSARY

VOLUME 26, NUMBER 2, AUGUST 1997

TEAMING UP TO TAME THE PAPER CHASE

HIGHER TECH

Many of you liked our facelift... judging from these reader comments on our last issue:

You gave JD Journal *a great facelift. It is easy to read, loaded with interesting, informative short stories, and eye-catching with a wide range of subject coverage.* Renate Zerngast, Deere & Company Photo Lab

Although it's often times difficult to break from tradition, you've done a superb job of incorporating many exciting changes from cover to cover, while retaining the positive attributes long associated with this publication. Our employees, retirees, and dealers will undoubtedly enjoy these new enhancements. Terry Eggerichs, Dallas Branch

About the cover ... The Accounts Payable A-Team of John Deere's Horicon Works knows the meaning of teamwork. Since 1993 the A-Team has worked together to conquer a workload that exceeded the number of people needed to get the job done.

The A-Team was one of 15 teams, representing all teams throughout John Deere, that gathered in June to be recognized at John Deere's first team-recognition event, "TeamPower '97 — Driving Genuine Value." The special day highlighted the commitment of individuals to a common purpose and showcased the possibilities they create. The teams gathered at the Deere & Company headquarters in Moline, Illinois.

Deere Chairman Hans Becherer said, "All of us are team players. Teamwork makes us part of something more than we can achieve on our own. Teamwork, however, does not just happen. It's a labor of hard work, patience, and perseverance. Significant individuals create significant teams. This effort, your effort, is a powerful and lasting impetus for attaining corporate growth. TeamPower, then, drives Genuine Value." ■

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25TH ANNIVERSARY VOLUME 26, NUMBER 2, AUGUST 1997

Published for John Deere Employees, Retirees, Dealers, and Friends Worldwide

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MEET THE ACCOUNTS PAYABLE A-TEAM, JOHN DEERE HORICON WORKS:
From left: Carol Hereid, Karla Mertig, Pat Tank, Deleen Nehls, Mary Abbey, Sandy Farrel, Jean Carolan, Chris Stam. Photo by Greg Baker.

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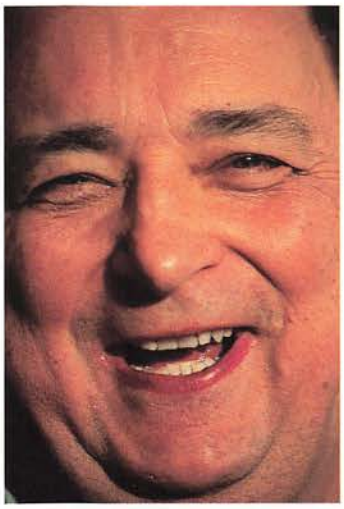
FEEDBACK

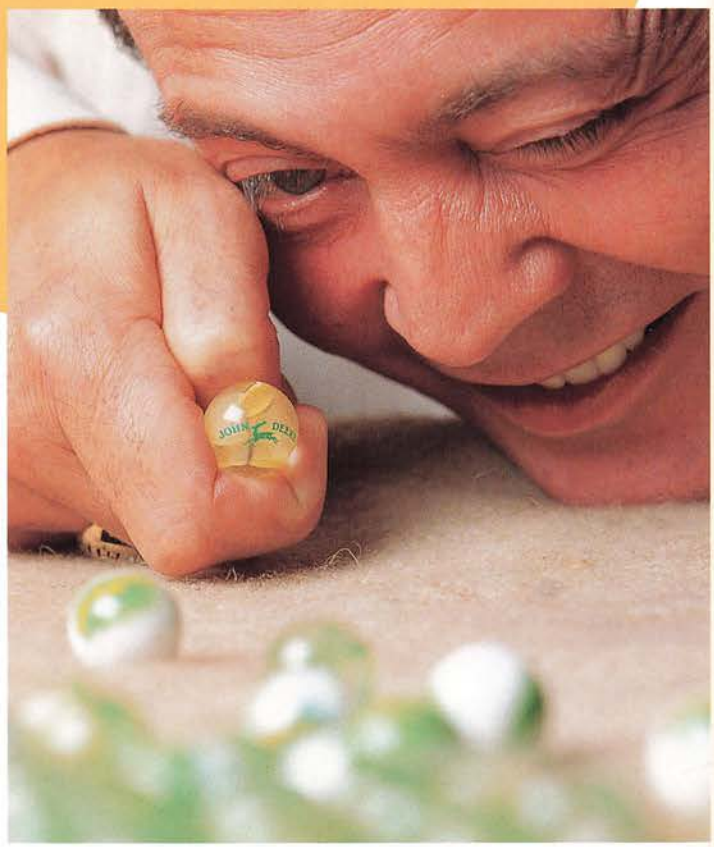


I enjoyed your article about humor in the workplace ("All Work and No Play?," Volume 26, No. 1). What a relief to read that we acknowledge the health and creativity benefits of the occasional on-the-job "chuckle." Of course, there's a time and a place, but if we want to retain our edge, we need to constantly question how we do things. There's many a word said "in jest" which has led to an invention or new way of thinking. (Above, Ulrich Wuttke, manager of factory marketing, John Deere Werke Mannheim.) *Fred Laudenklos, Manager, Transportation, Deere & Company European Office, Mannheim*

My name is Jeremy. I am writing this letter for English class and I want you to know what I am saying is true. I did not write this to get an A+. My brother was born in 1984 and when I was born in 1986, my dad thought we needed a bigger house. We went to the John Deere store for a lawn mower and bought a 320, and 11 years later it is still running like brand new. I guess the saying is true, Nothing Runs Like a Deere. *Jeremy Harpel, Pemberville, Ohio*

After you included me in your recent story, "The Exotic World of John Deere Collecting" (Volume 25, No. 3), we have been flooded with inquiries about John Deere marbles. Most of the calls and letters were about the 1950s marbles mentioned in the article, however one inquiry did develop into another great find: John Deere marbles made for the John Deere Dealers' Association 125th Anniversary — another "find of a lifetime" for me. *Michael Pratt, Sr., The Marble Emporium Company, Freemont, Nebraska*

Your last issue left me feeling very disappointed. The cover of Volume 26, No. 1, featuring the "Big Wheels at the Harvester Powerhouse" was the problem. The quality of the photo was excellent, but the content was not. A very critical element is missing. There is not one woman in the picture. I hope future team pictures will include the very important people who help make your company the great company that it is, women. *Frank Thissen, Lakeville, Minnesota*



Editor's Note: We are sensitive to the issue of workplace diversity, and the importance of reflecting it in our corporate communications. We certainly agree that Deere's success depends on respecting and recognizing all individuals, no matter what gender, race, or age. While the team featured on the cover of our May 1997 issue was all male, the cover of this issue features an all-female team from the John Deere Horicon Works. You raise such a good issue that we plan to do an article on the subject in our next issue.

We were shopping for a pedal-type tractor for our young son, and looked at several different brands, including those of your competitors ... mainly to see what color he liked best. He chose the John Deere. Or as he put it, he liked the one with the "reindeer" on it the most! *Robbie Hodges, South Carolina*

We invite your feedback and welcome news tips and story ideas as well. If yours is used, we'll send you a *JD Journal* T-shirt. Write Feedback, *JD Journal*, John Deere Road, Moline, IL 61265, call 309/765-4106, or e-mail: people@deere.com

Higher Tech

For a so-called "metal-bending" company, John Deere does its share of pushing the envelope of technology.

Iowa State University's virtual reality lab, funded in part by Deere & Company, is currently the largest virtual reality module in the world. Above, ISU students strap on goggles for a ride on a John Deere tractor, the lab's "centerpiece."

The assignment came in, fittingly enough, by e-mail. It glowed on the computer screen, laser-like in both its intensity and its brevity.

"High Technology at Deere & Company — looking for an article that reviews areas of high technology where we are employing the tools of the next century, today."

Quickly, The Writer composed an electronic message to begin scheduling the interactive research activities — long ago, they were called "interviews"— and to scour computerized databanks and Web pages on the Internet for information on Deere's technologies and advances.

For better or for worse, he thought, the future was already here ...

VIRTUAL PROTOTYPING

Picture a highly sophisticated video game, which allows John Deere personnel at their own facilities worldwide to interact with each other and with the electronic image of a new product — a product complete in every detail except for the plastic, glass, rubber, and metal that otherwise would be required. Design revisions or experimentations that might take weeks or even months in "reality" can be done quickly and efficiently by simply manipulating the computerized design.

For Deere & Company, that's an exciting prospect, and one well worth examining in virtual detail. That's one reason the company is one of the primary sponsors of an experimental laboratory at Iowa State University, in Ames, Iowa, where virtual reality is inspiring researchers and fascinating visitors.

"We used virtual prototyping to refine the design of an instrument console on one of our products," explains Brad Keleher, a Deere & Company senior engineer. "We made changes to the design based

on feedback from interacting with the prototype after each change. It would have taken many months to detail, fabricate, and build enough physical prototypes to iterate through the design decisions we made in one day using virtual prototyping.

"Deere is an industry leader in virtual prototyping," Keleher adds. "Many companies see the potential advantages, and some have experimented with it. We're already using it for design, analysis, and evaluation tasks, and to make real engineering decisions on actual product development programs."

Given the nature of technology, there may not be such a thing as "full implementation" of virtual prototyping; it's a moving target fueled by scientific progress and the needs of users like Deere & Company. But it's fair to say that the day when virtual reality is commonplace throughout Deere is definitely coming, and coming quickly.

ACCELERATED DESIGN VERIFICATION LAB

Here, in the Deere Accelerated Design Verification lab in the Deere & Company engineering department, a combine's grain bin is aging faster than a glass blower with hiccups. And for the same reason ... extreme stress intentionally accelerated by a factor of at least 10-fold.

Bolted to a complex array of electrohydraulic pistons, springs, and servo-motors, the bin is arrhythmically lurching and bobbing —mimicking the movements of a loaded grain bin atop a combine as it passes over a fiendishly bumpy surface.

"Right now, it's doing the rice harvest simulation," says Chuck Neff, manager of engineering mechanics and plastics applications. He smiles, the very picture of a scientific Dennis the Menace. "It's one of the most punishing simulations we've modeled with a whole lot of stress on that bin."

Sadistic tendencies of engineering types aside, the purpose of this Industrial Age Inquisition chamber is to use technology to test technology — and to do it in a time frame that allows the findings to be incorporated into production processes as quickly and efficiently as possible.

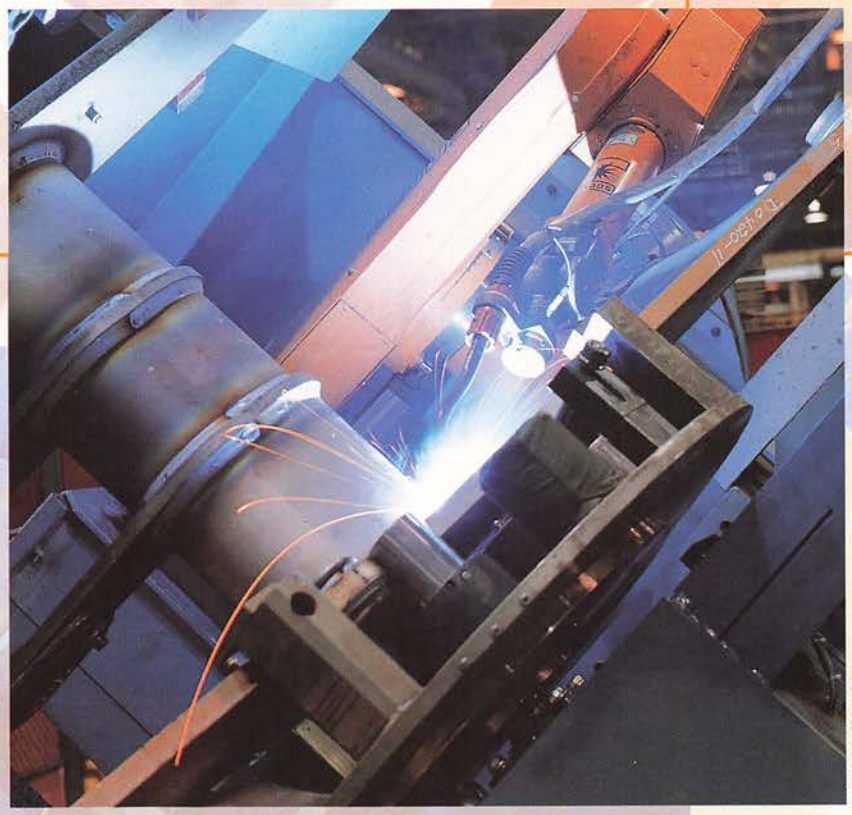
"In the past, stress testing focused merely on testing to failure," says Neff. "You literally beat the heck out of the product until it broke, and hoped that what you were doing had at least some parallels to the real world.

"But what you're seeing up there today is something far beyond simple stress testing. Everything that's happening to that grain bin is following a computer model that came right from an actual rice farmer in California working a field cross-laced with high berms. Each movement follows the actual experience — the only difference is that here we can accelerate the process. We can put 10 years worth of harvesting duty cycles on that bin in a matter of 300 to 400 hours. And we do it realistically, the way it happens in the field, not just by increasing the loads."

Design revisions or experimentations that might take weeks or even months in "reality" can be done quickly and efficiently by simply manipulating the computerized design.

Deere & Company has put a lot of effort and resources into the Accelerated Design Verification (ADV) process. It had to, because in ADV it's the precise details that make the difference. Anybody can make a machine that knocks a grain bin around. As Neff explains, the trick is to knock it around in a way that precisely duplicates what happens in actual practice. "Your results are only going to be as accurate as your computer modeling," he says. "There's a lot of work up front in the field, videotaping, taking time histories, measuring, and putting strain monitors and sensors on tractors. You digitally monitor every nuance of your input, looking for the things that cause damage in the field. You have to be sure you're monitoring the right stuff, or your findings will be wrong." The

Deere & Company has learned to combine the productivity of robotics with the high precision power of laser cutting for parts. These world-class lasers slice steel with a surgeon's precision in a process that reaches 5,000°F.



PHOTOS: ROB REGOVICH

PHOTO: JOHN RILEY

findings from these tests are crucial elements in Deere's ongoing program of finding the most durable, efficient and economical materials and using them in applications across the range of vehicles, implements, and components used by its customers.

Today, using algorithm-based scheduling, the daily planter assembly schedule is compiled in minutes instead of the hours it took previously.

In farm equipment, Neff says, John Deere is the undisputed leader in ADV technology, as well as applying it to production. "We're basically metal-benders at Deere, and I don't expect to see that change in the near future," says Neff. "But we're a leader in researching and using alternative materials where we find it makes sense. As a result of the work we're doing here, you'll see more and more composites being incorporated into future designs." A wide range of plastics and composites, including improved glass-fiber and leading-edge Kevlar and graphite-based materials, are being tested or are already in use.

GENETIC ALGORITHMS

In the world of advanced mathematics, John Deere scientist Bill Fulkerson is definitely up there in the major leagues — defined, in the rarefied air that pure mathematics occupies, as the Smithsonian Institution. In June, Fulkerson's work in an advanced discipline known as genetic algorithms became part of the Smithsonian's Permanent Research Collection of Information Technology Innovation at the National Museum of American History. Working with Optimax Systems Corporation of Cambridge, Massachusetts, Deere & Company was one of the first manufacturers in the world to implement genetic-algorithm-based scheduling in daily production.

"The whole idea was to look at a very complicated schedule with a very large number of possible solutions and mathematically develop an increasingly more effective solution," says Fulkerson. "In practice, we must satisfy customer orders while operating economically and efficiently. Our system enables assembly workers to build an order with options — the kind of specific options a customer would want on his own unique purchase — as efficiently as possible."

For instance, more than six million possible combinations of planters can be ordered. Today, using genetic-algorithm-based scheduling, the daily planter assembly schedule is compiled in minutes instead of hours.

"In human terms, a customer can get his John Deere vehicle built and delivered faster," notes Fulkerson. "That brings it to the bottom line for everybody."

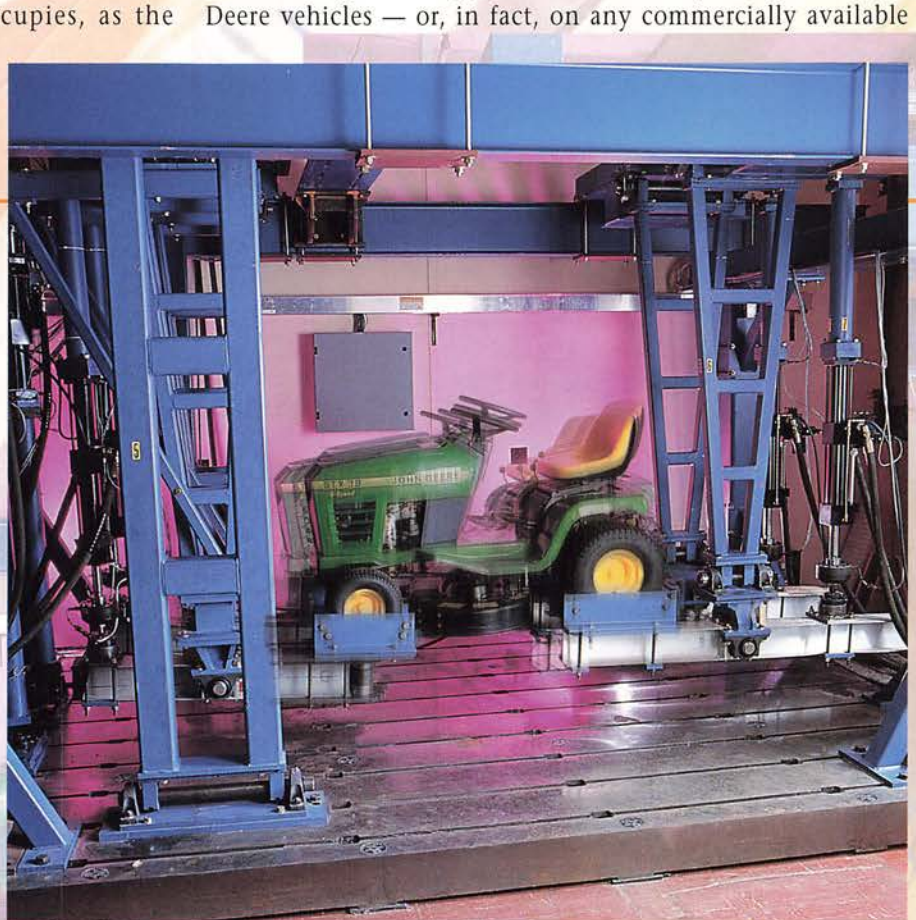
COMBATING WEAR

It's time for a pop quiz in applied thermomechanics: fire up the engine in your John Deere combine and let it idle for 10 minutes. Now lift the cowling over the engine, reach in with your bare hand, and grab the exhaust manifold.

The searing pain and resultant second-degree burn is the result of a phenomenon called "heat transfer." Pencils down, and pass your test forms to the front, please ...

But wait — you say that the manifold was cool to the touch, like metal that has been in the shade on a cool autumn morning? This, despite the steady throb of power from your idling diesel engine?

That's called "heat rejection," the result of a breakthrough in metal coating technology. And while it's not yet offered on John Deere vehicles — or, in fact, on any commercially available

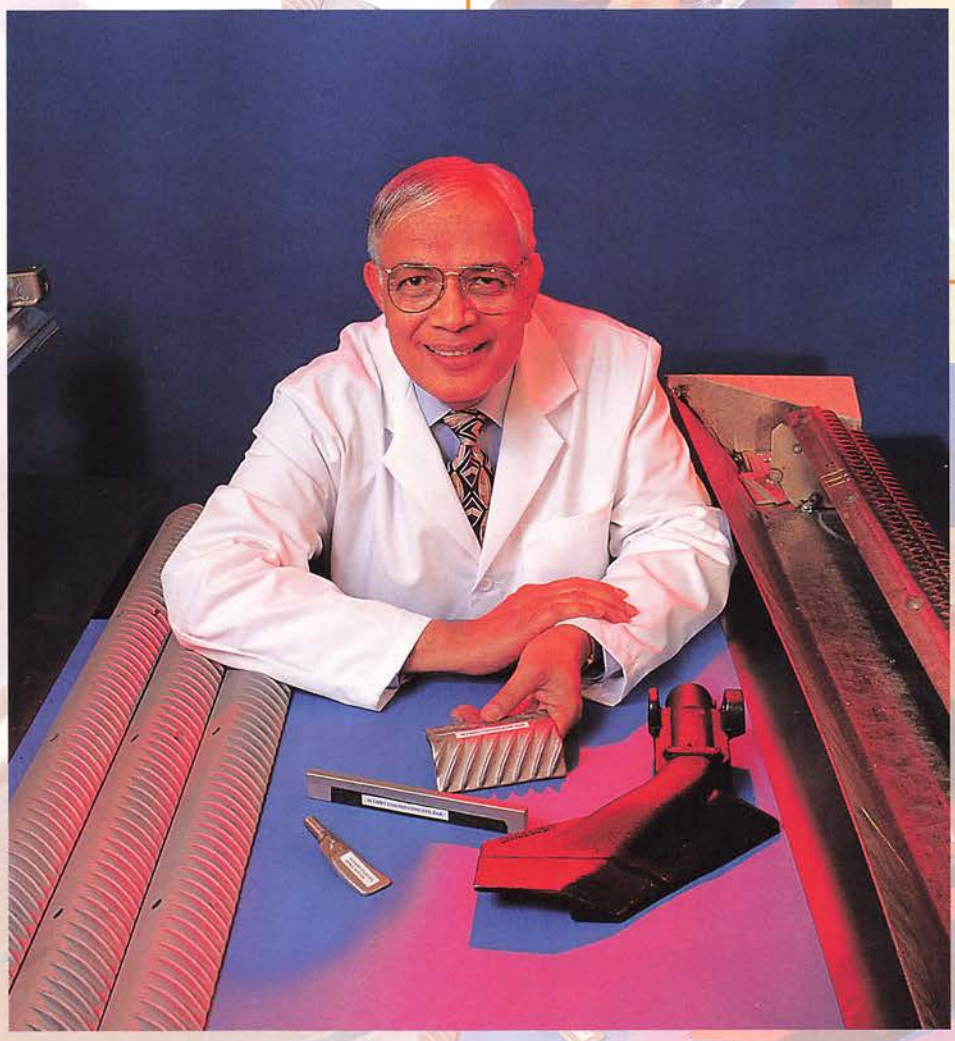


There's a whole lot of shaking going on in Deere's Accelerated Design Verification Lab. Deere equipment like this lawn tractor are put under extreme stress, intentionally accelerated to simulate experience in the field. In just 300-400 hours, a piece of equipment can endure 10 years worth of use.

products — be assured that Bruce Boardman and Gopal Revankar are looking into it. They're two of the Deere scientists who are industry-acknowledged experts in metals coating technology. It's the science (as well as the art) of developing technologies that can radically change the qualities of a given component by coating it with other substances that improve its durability, resistance to abrasion, or even — as in the case of the heat-rejection discussion now underway — its very nature.

"If we had the right coating on the inside of the engine manifold, it would reflect all the thermal energy back into the exhaust flow and the outside of the metal would not absorb any heat," Revankar is saying in his quiet, precise scientist's voice. "We know how to do it, but we don't know how to do it at a cost that the customer would bear," adds Boardman.

And that fact, never forgotten by John Deere researchers even in the most enthusiastic or theoretical of discussions, is the basis of what goes on here every day. When talking about the highest of high technology, Revankar, Boardman, and their colleagues throughout John Deere are acutely aware that they are engaged in the science of dollars and cents.



Gopal Revankar displays John Deere equipment parts treated with his recently invented special protective Gopalite metal coatings. Revankar and his colleagues are developing metals-coating technologies which radically improve a part's durability and resistance to heat and abrasion.

Case in point: the technology on which Revenkar has earned one of the patents he holds for Deere & Company has been applied in the manufacture of highly-wear-resistant engine components such as cam followers. What makes this research special is his ability to relate it to common everyday parts — cultivator sweeps and planter seed boots, for example. These are the kinds of parts that Boardman terms throw-away parts.

"When they wore down, you either notched the throttle up a little more to make up for the loss of efficiency of the part, or you went to your John Deere dealer and had new components put on," states Boardman. "Gopal's metal-coating technology makes those parts last longer — but the real breakthrough was being able to apply his coating in a way that made economic sense to the person who owns the tractor."

PRODUCT DELIVERY PROCESS

At Deere & Company, high technology is not only evident in what is manufactured, or even how products are manufactured. Leading-edge technology is applied even in the way products are envisioned, budgeted for, and administered. It's called the Product Delivery Process, or PDP — and it comprises the roadmap for new product development for the company.

This multistage process — the John Deere Agricultural Equipment Division uses six steps in its PDP, while the Construction Equipment Division incorporates five — requires participants to follow a clearly marked map. All parties involved then must agree that the current activity stage is done before the group can move on to the next. Along the way, the PDP team identifies crucial elements such as market/customer needs, competitive pressures, manufacturing capabilities, and others to develop a plan to deliver the right product to the right market under the right cost/price structure.

Most important, Bob Wismer, vice president of engineering, emphasizes, PDP seeks a discipline, and it imposes commitment of functional groups. It forces the company as a whole to examine what it is doing in light of the specific product goal it has set.

"In the past, we have occasionally been guilty of building products for engineers or salesmen, not necessarily for customers," says Wismer. "In today's environment, no company can afford those kinds of misjudgments. The PDP gives us a process for avoiding it." / *by Earl Merkel* ■

BUSINESS BUZZ

BUILDING NEW PARTNERSHIPS

The Worldwide Construction Equipment Division accounts for approximately one-fifth of total company sales and predicts positive growth in markets around the world. Dave Werning, director of international operations, says John Deere Intercontinental GmbH (JDIG) is investing in the foreign infrastructure now for the future benefits.

Bridging with Central America

The CRC (Comercializadora Regional Centroamericana) brings together dealers from six countries: Panama, Guatemala, Costa Rica, El Salvador, Nicaragua, and Honduras. The CRC is owned entirely by the participating dealers. It was set up in January to create one body which will order construction equipment from JDIG. The CRC holds inventory which it in turn sells back to each dealer as required. The pulling together of resources allows the CRC to make volume purchases. Since its inception JDIG has doubled its sales over the same period last year.

PHOTO: EDDY RIOS

Participating John Deere construction equipment dealers in Central America and Panama have created Comercializadora Regional Centroamericana, Inc. In May the group hosted an inaugural open house for its offices in Miami, Florida.

Moving down under and into Asia

An alliance between Hitachi of Japan and the John Deere Construction Equipment Division in Asia is delivering promising results in markets from which JDIG withdrew in the mid-1980s. Paul Beal, director of Far East operations, says "The two companies have complementary product lines. Hitachi is a single product company producing excavators; in markets where excavators account for 40 percent of sales, that's important. Deere provides all other products necessary to complete the line and compete against Cat and Komatsu."

In Australia, JDIG distributes through Marubeni Construction Machinery Company, which is partially owned by Hitachi. Marubeni has a national distribution network, based in Sydney which allows JDIG to work with one centralized location. Beal predicts that this relationship will produce substantial gains for the company.

In China, JDIG continues to work on establishing a joint venture with Hefei Hitachi Excavator Company to manufacture wheel loaders. Hefei has a 47 percent share of the excavator market. Recently, JDIG concluded a $2 million order to China from Moline, the largest order to date for this market.

Making new changes in South Africa

Another market where JDIG is becoming more active is South Africa. Political change and improved economic conditions have resulted in a sharp rise in sales in South Africa. In July 1996, JDIG concluded an agreement with Bell Equipment Ltd., based in Richards Bay, South Africa, to act as sole distributor for JDIG in South Africa. ■

John Deere construction equipment is privately labeled with the decal of Bell Equipment Ltd., the sole distributor for John Deere Intercontinental GmbH in South Africa.

PHOTO: MIKE NEWELL

In June, employees representing all John Deere business units gathered in Moline to be recognized in the company's first annual Team Recognition Day.

RECOGNIZING TEAM POWER AT DEERE

"Decisions made by a group of people tend to be better than those made alone. Teams are the most effective way to make, implement, and manage decisions." This was the message delivered by Deere & Company Chairman Hans Becherer at the first annual Team Recognition Day on June 16, at Deere & Company's headquarters in Moline, Illinois. The participants comprised fifteen teams representing all divisions.

"Teams are not a new concept at Deere & Company; however, they have become more active and formalized in the past 10 years. This event seeks to promote the power of teams and recognize their exceptional contribution to our organization," states Dick Kleine, vice president, quality. The idea of creating such an event came from the Deere Quality Plan, which identified two key tasks in this area: move to process centered teams and recognize outstanding Total Quality performance.

The teams recognized were selected by their divisions as the best example of how teams can work effectively. During the event, each group made a presentation on their experience, from project selection to implementation. Each team was able to share their experience and learn from others.

Project Leader Katy Graff explained, "This event sought to acknowledge the work of teams worldwide; to create a platform to display their skills and share their experiences." The projects were varied, ranging from creating a new process to procure desktop computer equipment to the development of a process that dealers can use to assess their performance compared to world-class dealer criteria.

The teams recognized at the first annual Team Recognition Day were:

- Accounts Payable A-Team
- Combine(D)-Power
- Deere Power Systems Group Focus Team
- Desktop Computer Acquisition Team
- Endorsement Process Improvement Team
- Export Order Department Reengineering Implementation
- Future By Design
- JDPOINT (John Deere Parts on the Internet)
- John Deere Health Care Formularly Implementation Team
- Lawn & Grounds Care Retail Finance Consolidation
- 1997 Product Introduction Team
- John Deere United Kingdom Team
- OFT Crawler/Backhoe Team
- Waterloo Works Paint System Reliability Team
- World-Class Dealer Team

"This event sought to acknowledge the work of teams worldwide; to create a platform to display their skill and share their experiences."

BUSINESS BUZZ

TRADE MAKES US STRONG

Hans Becherer, Deere & Company Chairman & CEO, captures the importance of trade to Deere & Company: "The reality is that our marketplace is global; today Deere does business in more than 160 countries. So we need to be a global player — ideally in a world where there are no barriers to trade and all players operate on a level playing field."

A more-level playing field is exactly what nations have been trying to create through the General Agreement on Tariffs and Trade (GATT) negotiations that ended in 1994, and negotiations within the organization that replaced the GATT — the World Trade Organization. These talks generated the elimination of tariffs on certain agricultural, construction, and lawn and grounds care equipment among member countries. The result: Tariffs of approximately $45 million per year on John Deere equipment are being phased out over a four-year period ending in July 1998.

Free-trade areas also are springing up in all parts of the world. The North American Free Trade Agreement (NAFTA) established among the U.S., Canada, and Mexico in 1993, is one example. The MERCOSUR, a trading bloc formed in 1991 by Argentina, Brazil, Uruguay, and Paraguay, is another.

Dean Dort, vice president, Washington Affairs for Deere & Company, cautions, "Despite the progress these agreements represent, we should not expect all trade barriers to vanish overnight."

Becherer adds, "Deere & Company is committed to seeking out global opportunities to grow. Trade with other nations opens our eyes and minds to competition and other cultures. It keeps U.S. businesses on their toes and makes us strong."/*by Gillian Lederman* ■

TRADE FACTS

- ***More than 4,000 jobs at Deere & Company are trade related.***
- ***Deere & Company sells to over 160 countries in the world.***
- ***The U.S. is the world's largest importer and exporter.***
- ***In the past decade, exports have been responsible for one third of the U.S. economy's growth.***
- ***Exports support more than 11 million U.S.-based jobs.***

NEAT STUFF AT YOUR JOHN DEERE DEALER

We may be approaching the "dog days" of summer, but at John Deere, it's looking a lot like Christmas. John Deere dealers will have an array of new holiday items just right for the collector on your gift list.

An **antique brass John Deere ornament** and a **dated pewter sled** are among several new ornaments available this holiday season. The 20-inch **"Santa Rides a Deere" stocking** features a John Deere Model "GP" tractor.

Also new this year are several items featuring the popular "Johnny Tractor and His Pals" characters ... including a nite-lite lamp, switch plate, rug, and plastic tumblers. All items will be available at participating dealers later this fall. ■

UP AND RUNNING IN CHINA

The joint venture between Deere & Company and Jiamusi Combine Harvester Factory is completed. This anticipated alliance was announced in May by Bernard Hardiek, president of John Deere's Worldwide Agricultural Equipment Division. "This pioneering cooperative effort between Deere and Jiamusi is the latest example of Deere extending its pre-eminent leadership position in agricultural equipment worldwide," said Hardiek.

This is the first time that John Deere will have an ownership interest in an agricultural-equipment-manufacturing operation in China. The factory will produce combines designed for use in China, as well as for eventual export to the Asia-Pacific region.

Deere & Company has a 60 percent interest in the new venture, which has $29 million in assets and will be known as the **John Deere Jailian Harvester Company Ltd.** ■

Do surveys really work?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Most John Deere employees took an employee survey last year. The results are helping forge a more effective, employee-friendly organization.

The Mayflower is noteworthy as one of the vehicles that brought the Pilgrims to America. However, had its passengers not pushed forward to design a civil and democratic nation, the ship would probably be just a footnote in history.

The John Deere employee survey administered throughout much of Deere & Company in 1996 is noteworthy as the vehicle that brought employee perceptions about the company to the fore. But the survey was not an end in itself — many units and departments throughout the company are pushing forward initiatives, based on the survey's results, to design a more-effective and employee-friendly organization.

The survey was developed under the auspices of the Mayflower Group, a consortium of blue-chip companies that shares the administration of employee-opinion surveys. As a member of the Mayflower Group, John Deere must survey its employees on at least 18 topics, and submit the resulting data, at least once every two years.

The survey, conducted over the last year and a half, plumbed employees' perceptions on Deere's approach to developing employees, reward and recognition programs, work environment, teamwork, supervision, and culture. Other topics explored included Deere's communication efforts, management leadership, career opportunities, and attitudes toward quality and innovation.

Communication emerged as a common topic of concern in the survey results. At Deere & Company headquarters in Moline, "employees placed the greatest emphasis on improving face-to-face communications, especially at the department-supervisor level," says John Gerstner, manager of internal communication. As a result, a headquarters' communication task force is working on a number of fronts, including ensuring that each department holds a regular, information-sharing meeting for all employees; expanding the Chairman's Coffee Program; and making training available for supervisors.

"We also plan to share more headquarters news via *JD Online*, Deere & Company's intranet," Gerstner says. Survey updates will be mailed out periodically to give employees a status report on progress being made in the key areas of concern.

The effort to use the survey results to improve communication resounds well beyond the walls of Deere's headquarters, however. At the Davenport Works, General Manager Dick Poterack has begun to include more information about that facility's progress — training, business results and processes, and customer focus programs — in his monthly all-employee meeting. Management at the Parts Distribution Center in Milan, Illinois, has begun quarterly employee information meetings to share business and process information, and to field questions from employees. Also, a communications consultant is helping refine the content and delivery of print and broadcast messages.

Meanwhile, the actuarial department of John Deere Insurance Company (JDI) has added guest speakers and information explaining company decisions to its

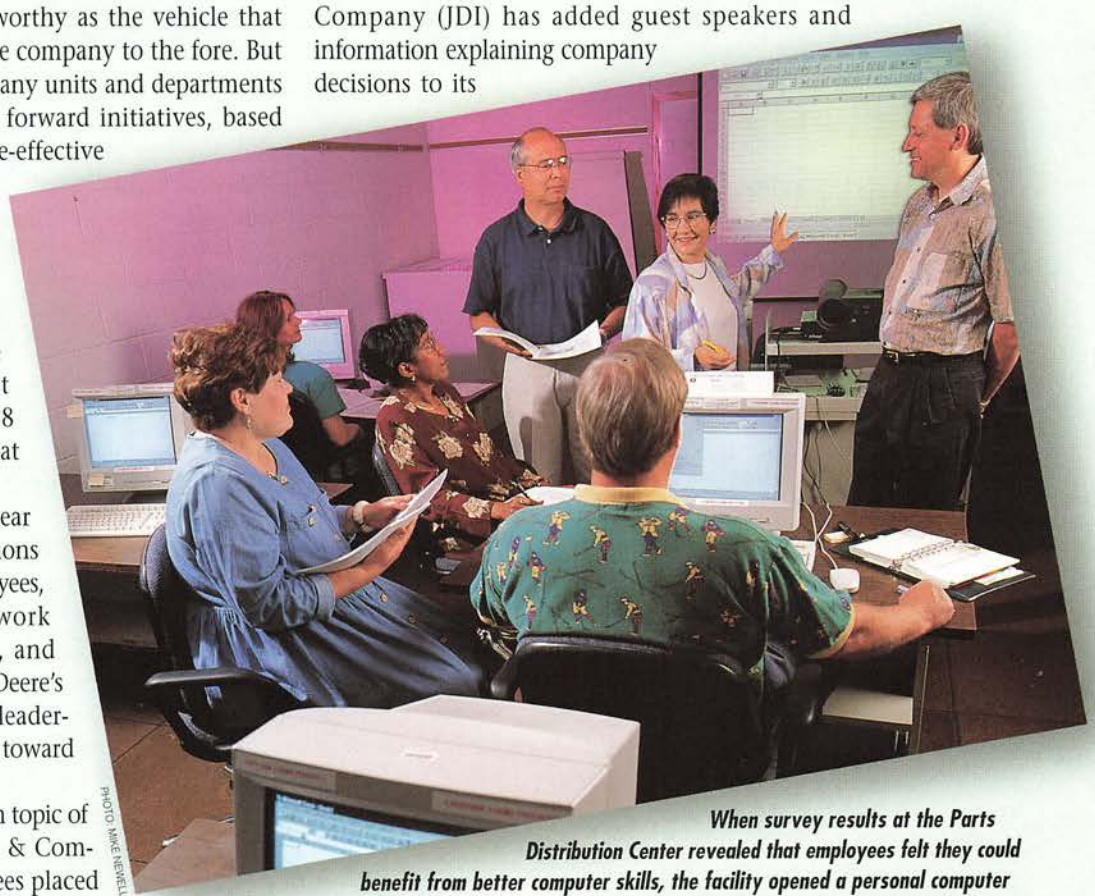


PHOTO: MIKE NEWELL

When survey results at the Parts Distribution Center revealed that employees felt they could benefit from better computer skills, the facility opened a personal computer lab. The lab is one of many company-wide projects developed in response to survey findings.

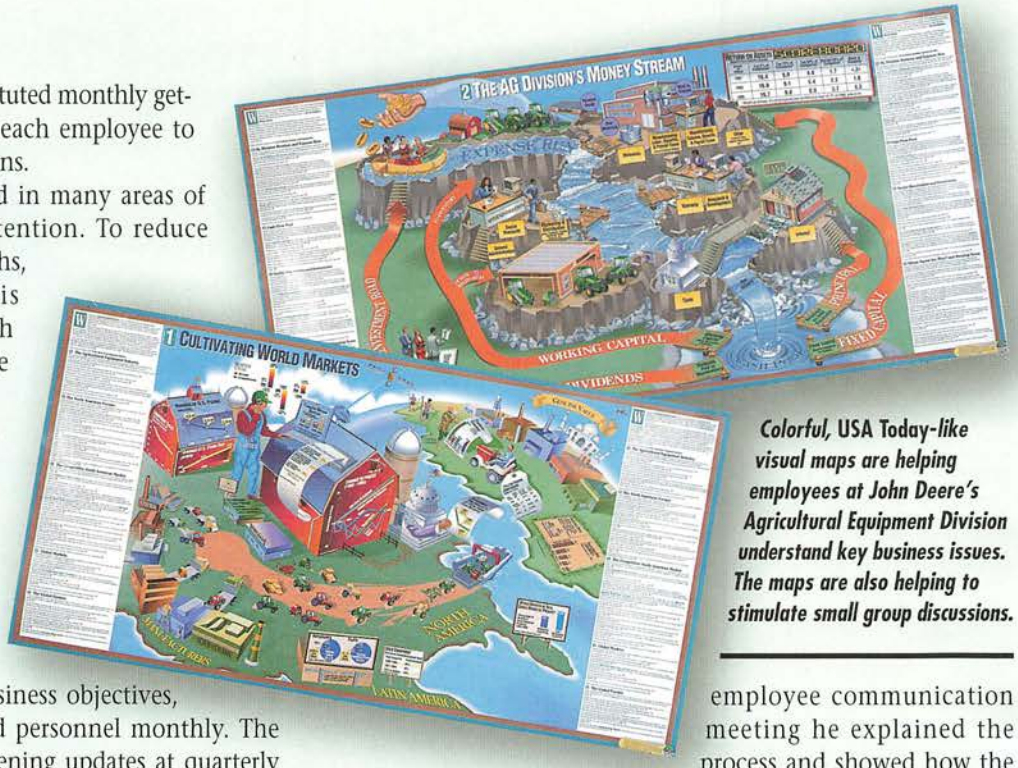
monthly employee meeting and has instituted monthly get-togethers between the supervisor and each employee to discuss projects, performance, and concerns.

Employee development also surfaced in many areas of the company as an issue needing attention. To reduce employee uncertainty about career paths, the Underwriting Division of JDI is developing a comprehensive chart with clear descriptions of all the jobs in the Underwriting area.

At the Davenport Works a "Position Available" program now publishes open salaried positions by e-mail and coaches unsuccessful applicants so they can improve their chance at future positions that become available.

The Parts Distribution Center has developed a summary, posted in the cafeteria alongside other important business objectives, which tracks the movement of salaried personnel monthly. The Center's employees now receive job opening updates at quarterly information meetings and update meetings. They have also become involved, through a focus group, in the Center's revision of its internal job posting and exchange processes.

At the Dubuque Works, the centerpiece of six employee-development initiatives generated from its John Deere employee survey process is a knowledge and skills assessment for salaried positions. The program projects what information and job skills its employees will need in the future and then compares employees against these requirements to identify the gaps that exist.



Colorful, USA Today-like visual maps are helping employees at John Deere's Agricultural Equipment Division understand key business issues. The maps are also helping to stimulate small group discussions.

Perhaps most important, they've learned that the process of making Deere a more satisfying place to work does not stop when the last survey has been analyzed.

"We then will develop individual development plans for each employee to close those gaps," says Steve Wohlwend, manager of human resources at Dubuque. "The beauty of this program is how it enables us to target and structure training for our employees more effectively."

A variety of other projects have blossomed company-wide out of the employee-survey process. Noting that employees felt they could benefit from better personal computer technology, the Parts Distribution Center developed a three-year strategy for providing personal computer access to all employees, updated employees on the strategy's progress, and opened a personal computer lab to support technical training in this area. When employees of John Deere Insurance indicated they weren't clear about the structuring of salaries and bonuses, Executive Vice President Wayne Ashenberg acted. At a regularly-scheduled employee communication meeting he explained the process and showed how the company compares with similar firms.

To enhance employee understanding of the business issues most pressing to Deere, the Agricultural Equipment Division turned to Root Learning maps, *USA Today*-like visual maps supplemented by dialogue that both depicts the issues and stimulate small-group discussions about them.

In 1995, the Commercial & Consumer Equipment Division conducted a survey similar to the Mayflower model that identified "quality" as an issue to which employees wanted greater attention paid. Since then, its Horicon factory has organized for, and achieved, ISO 9000 certification, while its office in Raleigh, North Carolina, has implemented a team-based, process-centered initiative (called Deere Track) as its quality improvement approach. The Division will begin administering a John Deere employee survey next year.

They've also learned that discussions held after surveying employees can yield as much or more information than the survey itself.

"After we completed our feedback sessions, we learned that some employees thought senior management might not share survey results," says Jan Potter, JDI human resources project analyst. "To address that concern, the executive management group of JDI compiled a book outlining the local and non-local issues the survey results raised for the company and the actions planned to resolve those issues."

Perhaps most important; they've learned that the process of making John Deere a more satisfying place to work does not stop when the last survey has been analyzed.

"We need to keep reminding ourselves and our people that the surveying process is not an event and that there is no panacea for some of the concerns or issues we're dealing with," says Kevin Keith, manager of personnel for the Parts Distribution Center. "It's just one important step in what should be an ongoing process of continuously improving our work environment." */ by Jeff Herrington* ■

ETC

JOHN DEERE IN THE DRINK

You never know where you'll find allegiance to John Deere proudly displayed. At right, an artificial pond on Vashon Island, near Seattle, Washington, has been smartly designed in the shape of a deer. **Bill Mann**, owner of the property, used a grid design and concrete blocks to create the 125 x 156-foot pond on a large field that flooded every year. Mann owns several pieces of John Deere equipment, and modeled his design after the leaping deer logo. His brother, Harold, added 1,200 feet of lights around the perimeter of the pond. ■

PHOTO: RON WURZER, SEATTLE TIMES

If you're flying over Vashon Island, near Seattle, Washington, keep an eye out for this deere-shaped pond. Deere's well-known two-legged leaping logo was the inspiration.

STARRY, STARRY NIGHT

When the comet **Hale-Bopp** blazed through the skies this spring, photographer **Jay Brausch** caught the magnificent display. This photo, including his Glen Ullin, North Dakota, neighbor's John Deere equipment, was taken on April 1 ... the date of the comet's closest approach to the sun. Take a good look, Hale-Bopp won't be around again until about the year 5400. ■

Photographer Jay Brausch captured two stellar performers together: comet Hale-Bopp and John Deere equipment owned by his North Dakota neighbor.

PHOTO: JAY BRAUSCH

JOHN DEERE PEOPLE AND PLACES

The **John Deere Commons Complex,** including the **John Deere Pavilion** and **John Deere Store,** in downtown Moline, Illinois, opened on August 16. For more information visit the Deere & Company Web site (www.deere.com). To read more about the John Deere Pavilion, please see *JD Journal*, Volume 26, No. 1. ■ **Hat's off to these John Deere customers:** In North Dakota this winter, **Don Halvorson** used his John Deere tractor to plow through blinding snow to rescue a woman stranded nearly eight hours in her car. When the levee broke on the Feather River near Marysville, California, **Tom Platter** caught a drifting utility pole, rode it home, started his John Deere tractor, and lifted two people to safety in its front loader. ■ Take the slow, scenic route from Moline to John Deere's home in Grand Detour, near Dixon, Illinois — on your bicycle. The **11th Annual Tour De Grand Detour** ride will be held September 20-21. Registration deadline is September 5. For more information, contact Cheryl Salley, Deere & Company Community Relations, 309/765-4540. ■ **Employee Spotlight: Gary Gesme,** director, business transformation, Deere & Company, is one of seven individuals named as as "employee of the year" by *CAREERS & the DisABLED* magazine. The magazine annually recognizes the professional and personal achievements of individuals with disabilities. **John Schletzbaum,** manager of transmission engineering, **John Deere Product Engineering Center,** Waterloo, Iowa, has received the American Society of Agricultural Engineers Iowa Section Engineer of the Year Award. ■ The *Farmer's Weekly,* the most popular agricultural weekly in the United Kingdom, included these words of wisdom in its advice column on how to be a perfect farmer's wife: "Learn your place. Don't try to compete and, in time, you can attain a comfortable little niche behind the collie, the John Deere, and Daisy the cow." We'll include their advice on how to be the perfect husband in our next issue. ■

ETC

YESTERYEAR'S PARTS CREATE ANNIVERSARY SCULPTURE

An eye-catching new sculpture is attracting the attention of employees at the **John Deere Dubuque Works.** The abstract sculpture, titled *Iron and Steel,* consists of heavy steel plates and parts from old John Deere tractors. The piece, which was created in partnership with students from **Jefferson Junior High School** in Dubuque, commemorates this year's 50th Anniversary of the Dubuque Works.

Jim Ehlinger, a welder at the Dubuque Works, coordinated the project. Ehlinger helped the students with their ideas and welded the sculpture's parts together. The students visited the factory several times to add to the design. Heavy steel plates, assembled in overlapping fashion, represent layers of stone and soil on the piece. The wheels, levers, gears, shafts, and columns represent John Deere's technological improvements. A small figure of a blacksmith rests on the sculpture's base, representing the company's heritage. The meaning and purpose of *Iron and Steel* is to "display the connection between tool making and the need to plow and dig in order to manipulate our environment," according to Ehlinger. The sculpture is a tribute to all the people of John Deere who "strive to create a better world by improving the technologies used to improve the earth on which we live." ■

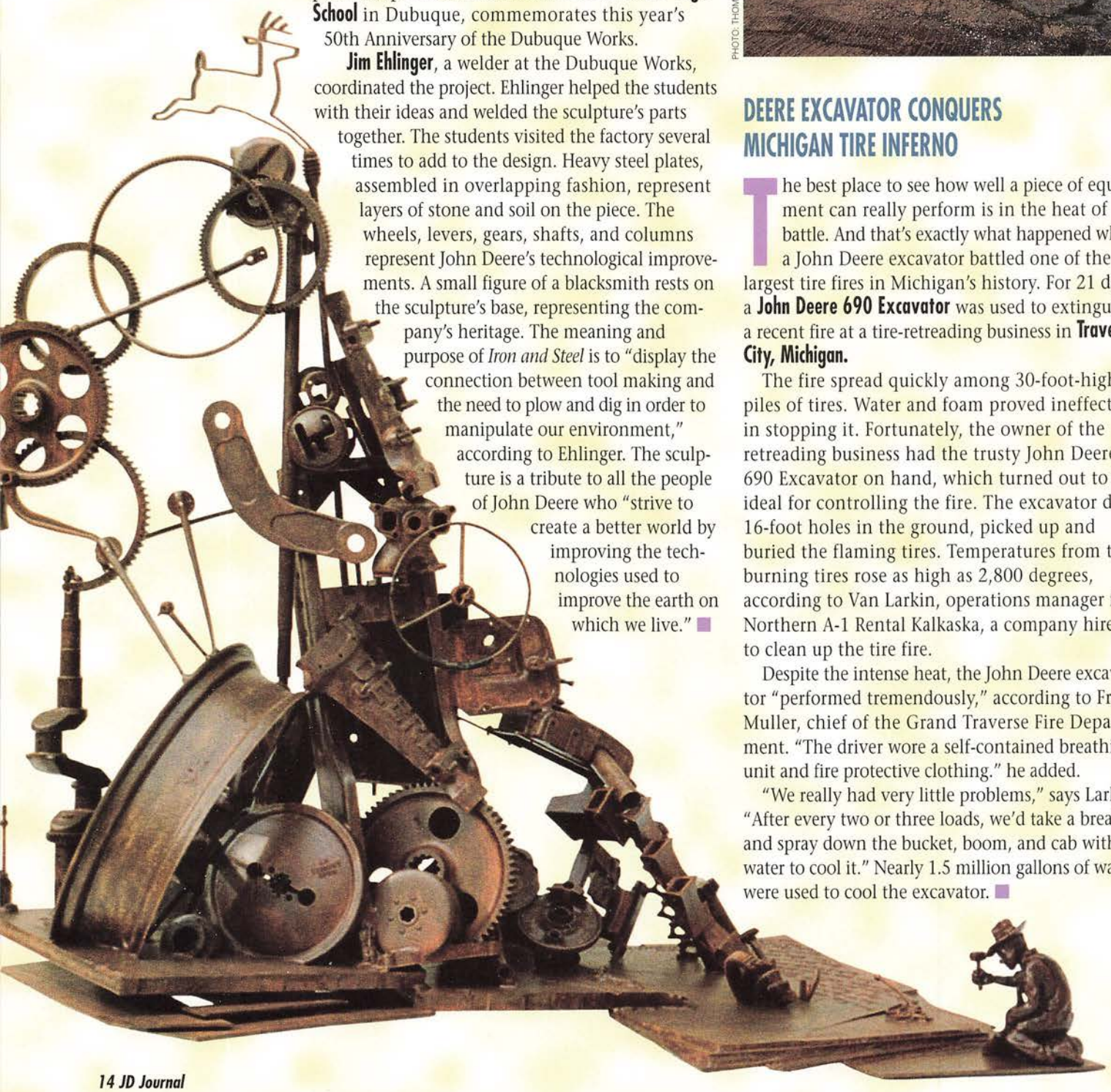


PHOTO: THOMAS KACHADURIAN ©1996

DEERE EXCAVATOR CONQUERS MICHIGAN TIRE INFERNO

The best place to see how well a piece of equipment can really perform is in the heat of battle. And that's exactly what happened when a John Deere excavator battled one of the largest tire fires in Michigan's history. For 21 days, a **John Deere 690 Excavator** was used to extinguish a recent fire at a tire-retreading business in **Traverse City, Michigan.**

The fire spread quickly among 30-foot-high piles of tires. Water and foam proved ineffective in stopping it. Fortunately, the owner of the retreading business had the trusty John Deere 690 Excavator on hand, which turned out to be ideal for controlling the fire. The excavator dug 16-foot holes in the ground, picked up and buried the flaming tires. Temperatures from the burning tires rose as high as 2,800 degrees, according to Van Larkin, operations manager for Northern A-1 Rental Kalkaska, a company hired to clean up the tire fire.

Despite the intense heat, the John Deere excavator "performed tremendously," according to Fred Muller, chief of the Grand Traverse Fire Department. "The driver wore a self-contained breathing unit and fire protective clothing." he added.

"We really had very little problems," says Larkin. "After every two or three loads, we'd take a break and spray down the bucket, boom, and cab with water to cool it." Nearly 1.5 million gallons of water were used to cool the excavator. ■

JUST GRANDPA AND ME

Last Christmas, **Tom McGlaughlin**, Jesup, Iowa, gathered together his grandsons Andrew (left) and Tyler for a special holiday card. McGlaughlin is a buyer in the Supply Management department at **John Deere Waterloo Works.** For those who suspect the toys belong to the children ... don't be fooled, they are part of grandpa's massive collection of John Deere toys. ■

PHOTO: REFLECTIONS PORTRAITS

Proud Grandpa Tom McGlaughlin, a buyer in Supply Management for John Deere Waterloo Works, shows off his favorite things.

COLLECTORS' CORNER

Editor's Note: Tell us about your unusual John Deere memorabilia. Write: JD Journal, *John Deere Road, Moline IL 61265.*

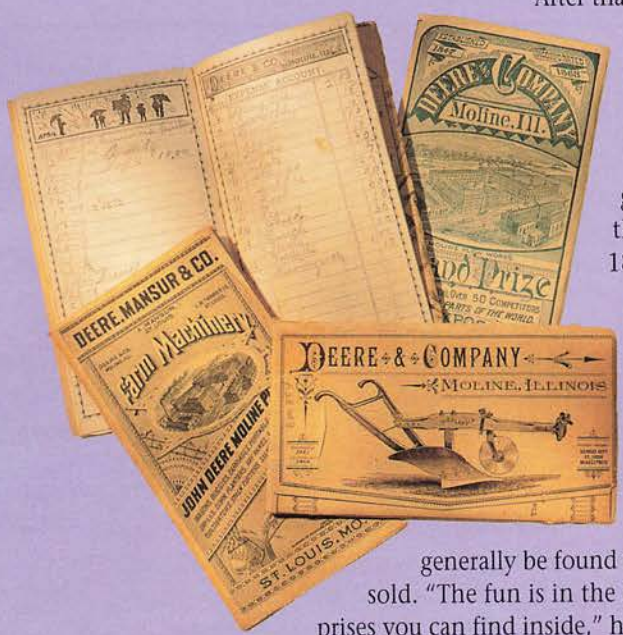
JOHN DEERE'S ANSWER TO POOR RICHARD'S ALMANAC

So you want to know the price of eggs in 1929, or the new John Deere product lineup for 1935? You can find a wealth of facts and data in the series of handy Farmer's Pocket Ledgers dealers issued yearly by the company since shortly after the Civil War, says **Jay Wohlgemuth,** Benton, Kansas.

"I like to collect the ones that are a little bit worn and filled in by the farmer. It's great to be able to read the history of a farm."

Wohlgemuth, who has about 75 different pocket ledgers, says that one of his prize possessions came from a flea market. "When I got home, I realized it was a record of my great-uncle's dairy operation in 1936."

Until about 1915, each branch issued its own ledger. After that, Deere & Company made one edition a year and stamped the John Deere dealer's name on it.



Wohlgemuth says a general price guide for the ones printed in the 1800s is about $50 to $300, depending on the condition. The early- to mid-1900 issues usually sell for $35 to $100. Prices vary from region to region.

Pocket ledgers can generally be found wherever antiques are sold. "The fun is in the looking, and the surprises you can find inside," he adds. ■

WHATDUYATHINKITIS?

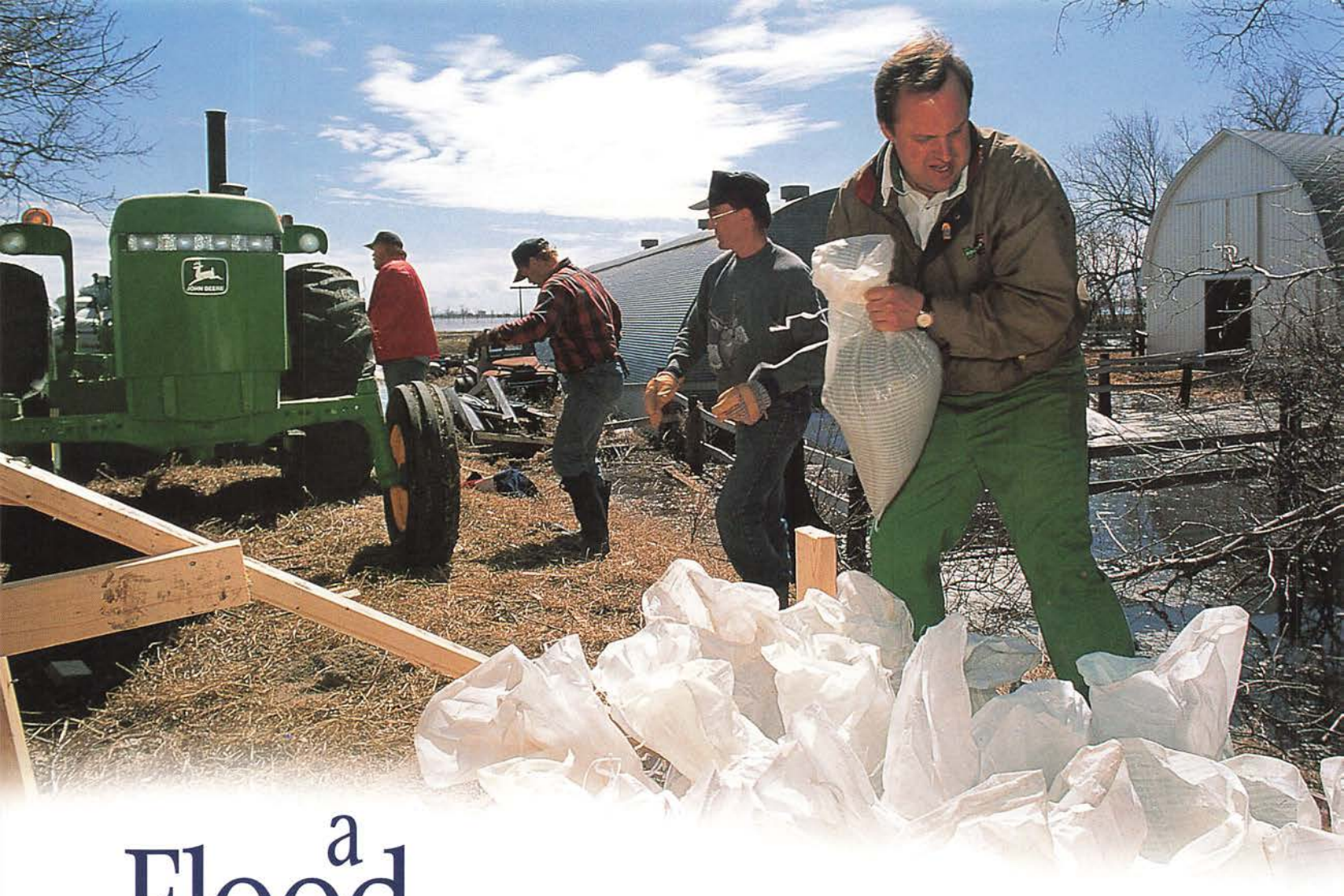
It looks like a "Rube" Goldberg can opener; it's really a side-delivery-hay-rake tooth-straightener. Antique John Deere hand tools like this piece are highly collectible, says **Darold Miller** (below).

"They come in many shapes and sizes. The company and its associates, such as Van Brunt and Syracuse Plow, used to include a toolbox on many of the new machines and implements sold in the late 1800s and early 1900s. The only way you can identify some of these tools is from their stamped part numbers and by comparing them to parts lists. Old parts books are the only place you can research antique hand tools. And, every once in a while, somebody will find a tool nobody else has seen," he adds.

PHOTO: JOHN SANDERS

The 78-year-old life-long farmer has been assembling his 150-piece antique John Deere tool collection for 30 years. He has seen some of the scarcer issues sell at auctions and swap meets for as much as $1,000. Many sell for under $10.

Miller offers a basic six-page tool guide he has put together for $6, postage-paid. Send your requests to: Darold Miller, Route 1, Box 37, Ceresco, Nebraska 68017. Parts books can also be ordered from Deere & Company; call 800-522-7448. */by Larry Riney* ■



a Flood of Heroism

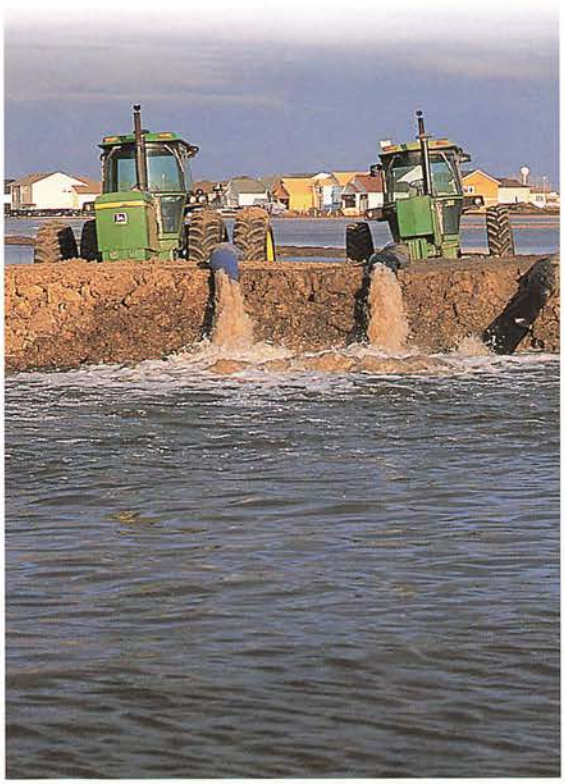
John Deere dealers battled tirelessly to help their neighbors and customers during the spring floods in North Dakota and Minnesota. Dan Gorder (foreground), manager for Grafton Equipment Co. in Grafton, North Dakota, helps build a dike around a customer's farmstead.

Nearly every John Deere dealer along the Red and Minnesota Rivers, and their tributaries, played an important role in helping others during the 1997 spring floods in North Dakota and Minnesota. While a few dealers were forced to build levees around their dealerships, they and other dealers still managed to help communities and customers by donating time and equipment.

Grand Forks Equipment was near the epicenter of the great flood disaster, although the John Deere dealership escaped the water by five blocks. Manager Jeff LaVoi reports that nearly every dealership employee hustled to help sandbag in an effort to save the community. Tractors, generators, and pumps were also donated by the dealership.

Still, like most of Grand Forks, 15 employees at Grand Forks Equipment suffered losses when their homes flooded. Employees from Hunter Equipment, Inc., a John Deere dealership south of Grand Forks, helped Grand Forks Equipment employees clean their flood-stricken homes, bringing with them generators, high-pressure washers, pumps, and trucks. Local farmers also received a helping hand, as Hunter employees removed trees and other debris from farmland. The John Deere Commercial & Consumer Equipment Division donated the use of 4 skid-steer loaders to help homeowners remove debris and move supplies. Similar stories of heroism abound in the Red River Valley. John Deere dealerships in Montevideo, Breckenridge, Fargo, Ada, and Grafton were among many that offered a helping hand to their communities, employees, and customers. "There's one thing about North Dakota and Minnesota people; when they're down and out, people come in and help," says Larry Nelson, manager, Hunter Equipment. */Story and photos by Christine McClintic* ■

R.D.O. Equipment Co. in Fargo, North Dakota, loaned four John Deere tractors to their flooded city to power dewatering pumps. Employees managed to protect their dealership from flood waters by building a dike, consisting of 10,000 sandbags and 70 concrete pilings. "We had a lot of people — both employees and customers — donate time to build and patrol the dike, and to man pumps around the clock," says store manager Brian Bergeron.



(From left) Dave Goebel, Bob Raveling, Jim Aamot, and Jeff Nieuwbeerta were among 30 employees at Kibble Equipment, Inc., who helped build a 3-mile levee around the town of Montevideo, Minnesota. The dealership donated forklifts and trucks for hauling sandbags and transporting generators for lights at the dike. Kibble employees volunteered their time to build a levee. "A lot of our customers were hauling sandbags, too," relates Goebel.

Brad Wood, parts manager for R.D.O. Equipment Co., delivers parts and supplies in the dealership's flooded parking lot to Breckenridge farmer Dan Ellingson. The entire 25 acres of the Breckenridge, North Dakota, dealership were under water, but employees went to great lengths to provide parts and service to customers.

BRAIN GAMES

It doesn't matter whether you do crosswords, jigsaws, or read philosophy. When it comes to your brain, experts say, use it or lose it.

As a regular and long-time crossword puzzler, Larry McMullen tackles four or five crossword puzzles a week. When letters have filled all the little boxes in the newspaper, the manager of engineering at John Deere Dubuque Works trains his sharpened pencil on crossword puzzle books.

By exercising his brain, McMullen not only stretches his vocabulary but also enhances his general cognitive skills.

Keep the mind fit and trim and have fun doing it — that's the message from experts who study the structure and function of the brain. In other words, "use it or lose it."

"It's absolutely true," Keith Meredith says of the notion that unused mental skills will become flabby. "The more you can engage the mind in activity, the more you will be able to learn, remember, and create."

The director of Gerontological Studies at the University of Arizona, Meredith sees plenty of older people who have managed to maintain their mental agility as they age.

1. Many shops have prices set just under a round figure, e.g., $9.95 instead of $10. It's assumed that this is done because the price seems lower to the consumer. But this isn't the reason the practice started. What was the original reason for this pricing method?

2. There are 3 light switches outside a room. They are connected to 3 light bulbs inside the room. Each switch can be in the on or off position. You are allowed to set the switches and then to enter the room once. You then have to determine which switch is connected to which bulb. How do you do it?

While people often assume aging causes mental decline, recent research indicates that millions of older Americans lose none of their mental faculties with the passing years. According to one study, healthy people in their sixties who keep physically and mentally active have higher blood flow and significantly better I.Q. test scores than those who are couch potatoes.

According to Alfred Kaszniak, professor of psychology, psychiatry, and neurology at the University of Arizona, "it doesn't matter whether you do crosswords or jigsaws or read Nietzsche, as long as the activity is actively engaging the mind."

In other words, TV doesn't cut it.

University of Iowa professor and chair of psychology and quantitative foundations, David Lohman, notes that not all mental skills are learned or maintained at the same rate. "For instance," he says, "as long as verbal abilities are exercised, they can continue to improve well into old age."

On the other hand, our ability to solve unfamiliar problems seems to be intimately linked with formal learning. Thus once we leave the classroom for the last time, that skill begins a gradual decline.

"That's a good argument in favor of things like continuing education and learning new skills on the job," Lohman says.

He adds there is fairly strong evidence that at any age, people who are challenged to try new things will s-t-r-e-t-c-h what they already know in new and creative ways. Mental exercise keeps various mental faculties sharp, including perception, concentration, reasoning, speech, imagination, and judgment. And, of course, memory. Studies show that when the mind is challenged, biochemical changes occur in the brain that enhance both attention and memory.

In some older adults, says Lohman, memory loss may be a sign of depression. In other cases what may seem like memory loss is actually the result of the accumulated "load" of a lifetime of memories.

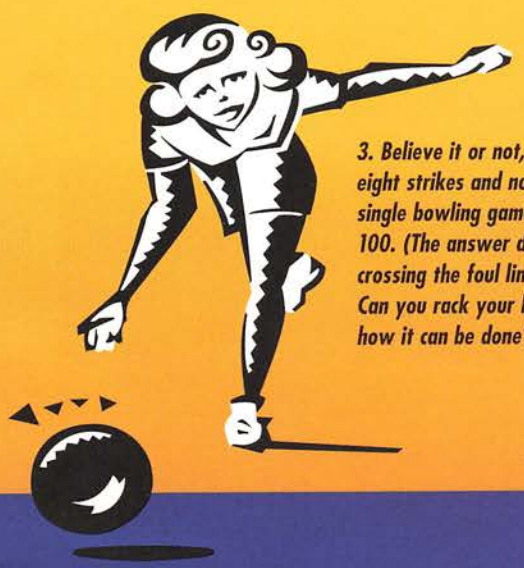
"When you're 75, you have vastly more data to search than when you were 18," Lohman explains. "When someone asks you to recall an image or a fact, it might just take a little longer."

One elderly genius Lohman knew explained it this way: "Thinking now is just the same as it was when I was 20 — just a lot noisier."

There's good news for those who want to tackle some "brain games" but never liked crossword puzzles. It doesn't matter what kind of mental exercise you do, as long as you do it.

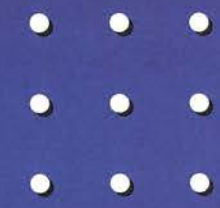
Go ahead, try your hand at "brain games." Here are a couple of our favorites. / *by Jean Florman* ■

CARTER + CLINTON = LINCOLN



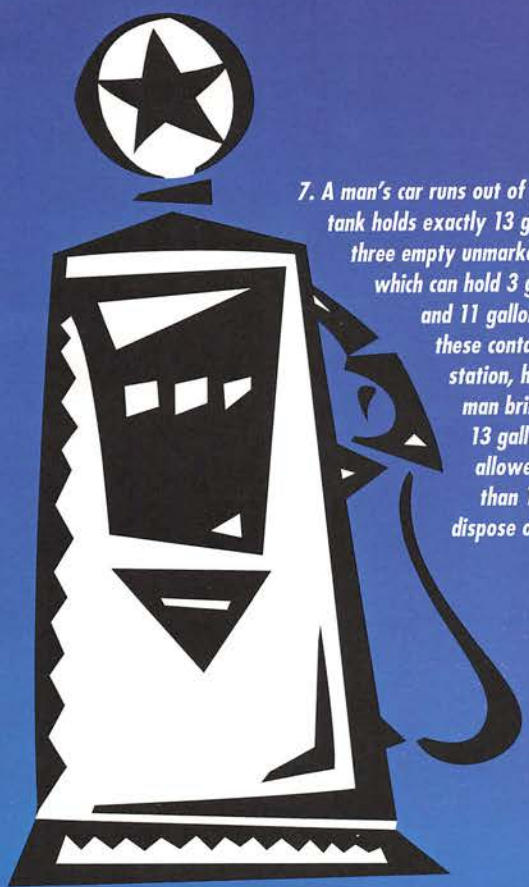
3. Believe it or not, it is possible to roll eight strikes and no gutter balls in a single bowling game and still not break 100. (The answer does not involve crossing the foul line for a penalty.) Can you rack your brain and figure out how it can be done?

4. Each of the letters in the addition problem represents a different digit from 0 to 9. Using math and logic, can you crack the code and find the unique solution?



5. Can you connect all 9 dots by drawing 4 straight lines?

6. Four men sat down to play.
They played all night till break of day.
They played for money and not for fun,
With separate scores for everyone.
When they came to square accounts
They all made quite fair amounts.
Can you this paradox explain,
If no one lost, how could all gain?



7. A man's car runs out of gasoline. His car tank holds exactly 13 gallons. He has three empty unmarked containers which can hold 3 gallons, 6 gallons and 11 gallons. Using only these containers at the gas station, how can the man bring back exactly 13 gallons? He is not allowed to buy more than 13 gallons and dispose of the extra.

ANSWERS

1. The practice originated to ensure that the clerk had to open the till and give change for each transaction, thus recording the sale and preventing him from pocketing the bills.

2. You set switches A and B on and switch C off. You wait a few minutes and then switch B off. You then enter the room. The bulb which is on is connected to A. The cold bulb which is off is connected to C. The warm bulb which is off is connected to B.

3. A strike in frames 1, 2, 4, 6, 8 and 3 in frame 10 = 8 strikes. In frames 3, 5, 7, and 9, the first ball scores one (by knocking down the 7 or 10 pin), and the second ball goes into the space vacated by the previously knocked-down pin, scoring zero without being a gutter ball.

4. 530890 + 561487 = 614564

5.

6. For the music they played, each band member was paid.

7. The man uses the meter at the gas pump to measure out exactly 13 gallons. He puts 11 gallons in the large container and 2 gallons into one of the other containers.

Games 1, 2, 6, and 7 are used by permission of Sterling Pub. Co., Inc., PERPLEXING LATERAL THINKING PUZZLES ©1997 by Paul Sloane and Des Macthale. Games 3 and 4 courtesy of GAMES MAGAZINE, 1993, 1996.

ROBIN MOLINE

Summer in the countryside is the subject of the second in a series of four seasonal panels created for the John Deere Pavilion in Moline, Illinois. Posters and other items featuring the Robin Moline mural will be available at the John Deere Store in Moline, which opened this month.

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